**Objectives**

- This course provides an introduction to the theory of concurrent computation and concurrent programming languages and their representation on concurrent architectures.

**Prerequisites**

- CS 450.

**Syllabus**

- The Essence of Concurrent Programming
- Hardware Architectures
- Applications and Programming Styles
- Conditional Critical Section
- Semaphores
- The Dining Philosophers
- Readers and Writers
- Resource Allocation and Scheduling
- Monitors
- Synchronization Techniques
- Disk Scheduling: Program Structures
- Message Passing
- RPC and Rendezvous
- Rendezvous
- Examples
- Paradigms for Process Interaction
- Ada Tasking
- Concurrent C++ Model
- Protected Type
- Capsule
- Selected Research Papers

Edited March 2006 (html, css checks)